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# UK Patent Application GB 2 233 201 A

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(56) Documents cited  
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INT CL<sup>4</sup> A01G

## (54) Plant or flower pot

(57) A plant pot incorporates a water storage reservoir 2 between inner and outer walls of the pot. An inlet 3 is provided on a top flange 13 of the pot to enable the reservoir to be filled. A porous plug 4 in the inner wall of the base 12 enables water to be forced by the head of water in the reservoir 2 through the plug 4 into the soil in the pot. A plurality of small air venting holes 132 on the opposite side to the inlet 3 allows venting from the reservoir 2 during refilling and emptying, but prevents insects such as gnats and mosquitoes entering the reservoir.

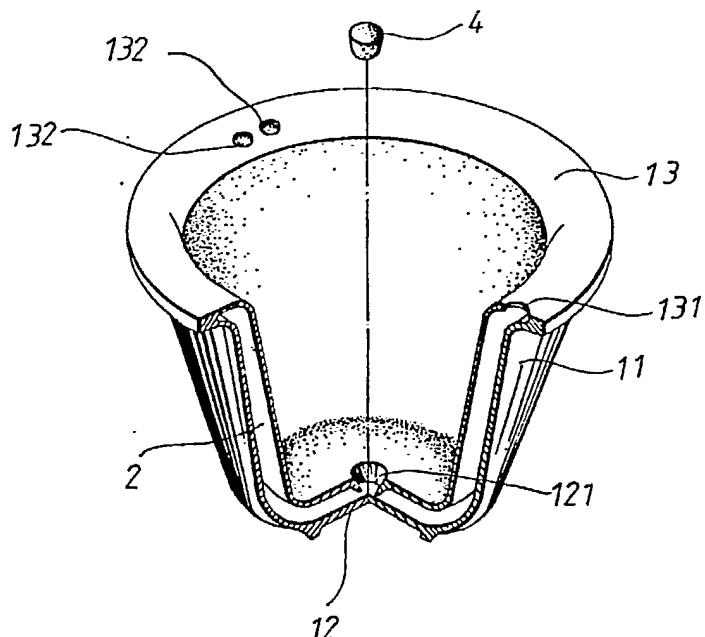


FIG. 2

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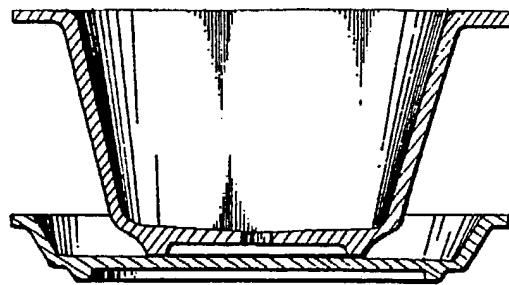


FIG. 1

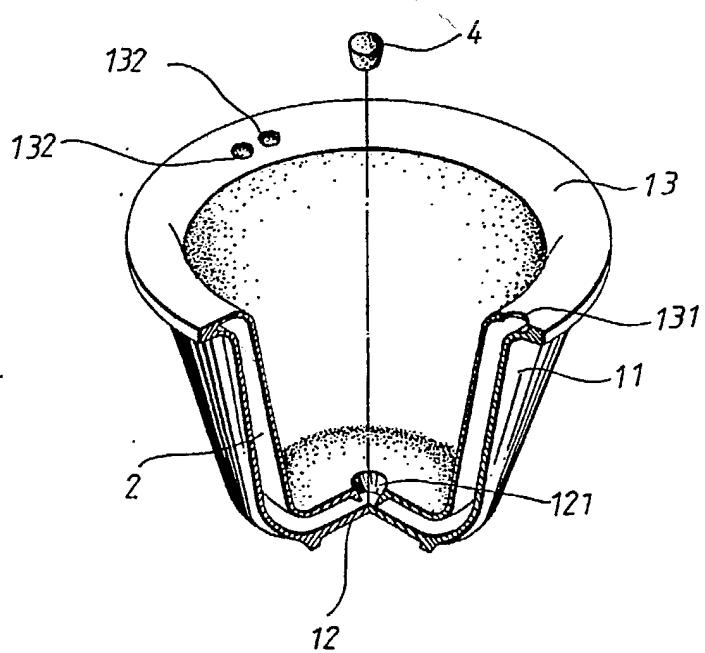


FIG. 2

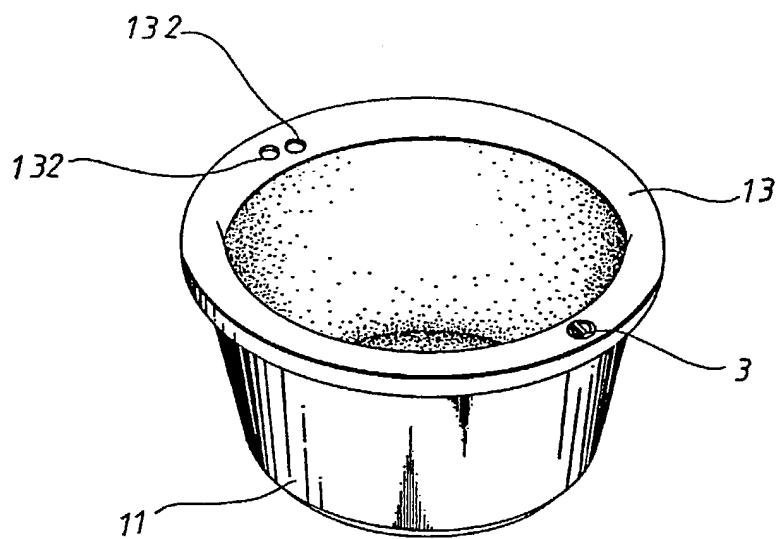


FIG. 3

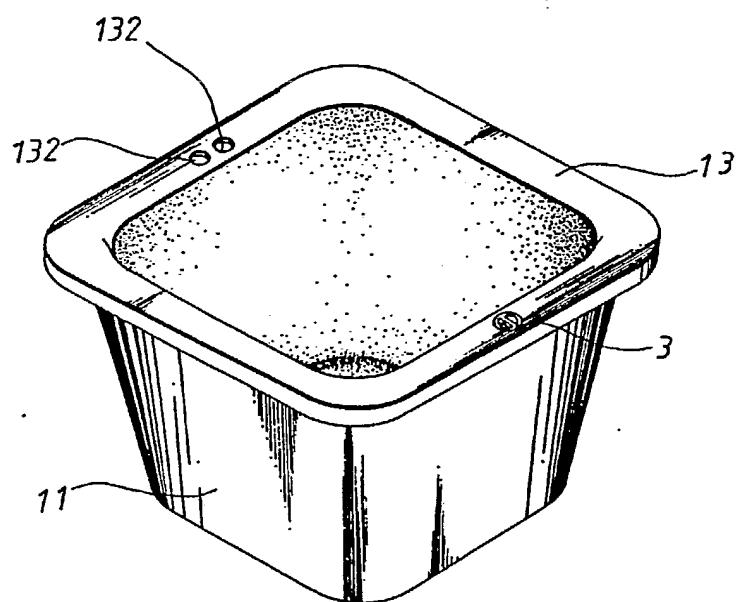


FIG. 4

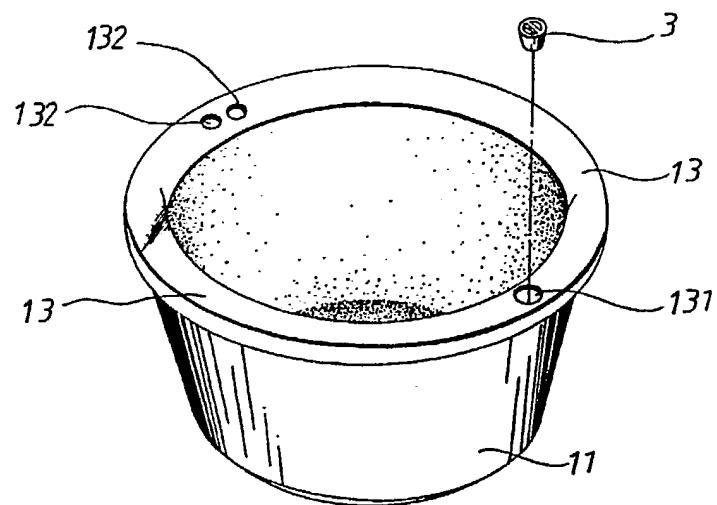


FIG. 5

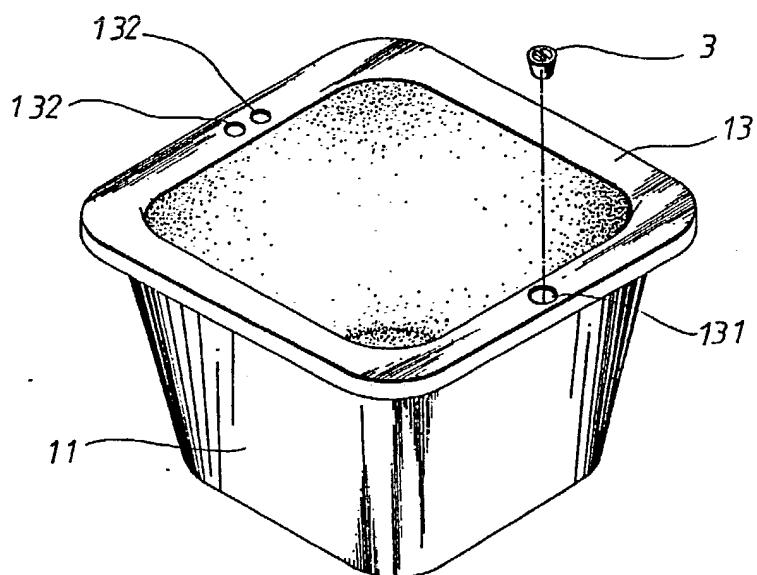


FIG. 6

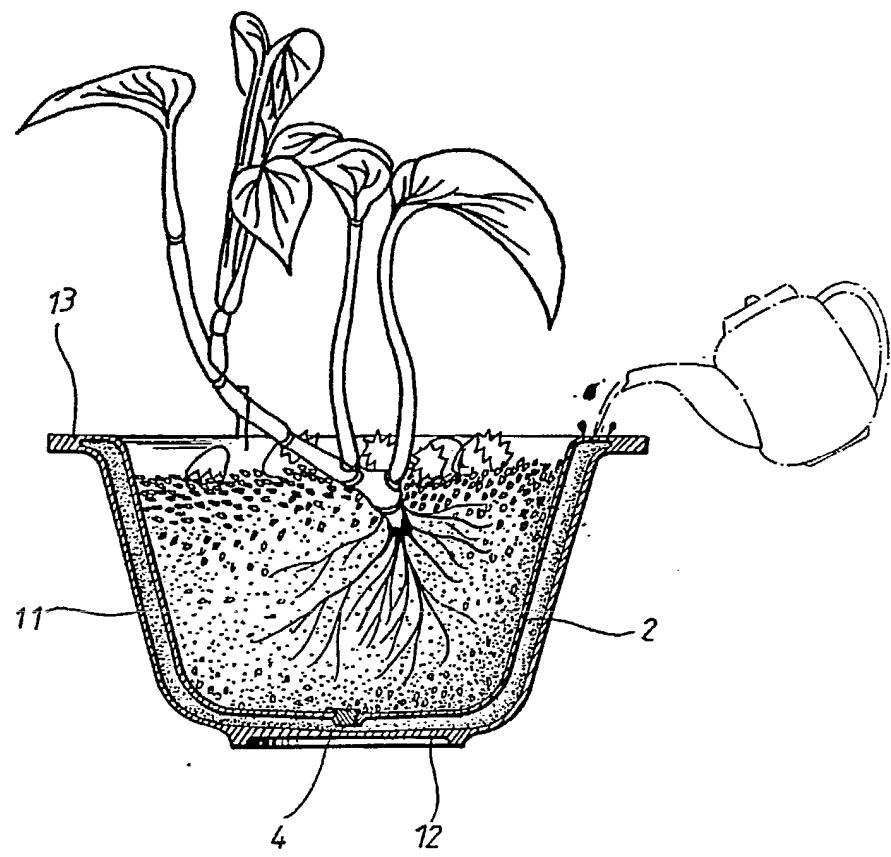


FIG. 7

## PLANT OR FLOWER POT

The present invention relates to a plant or flower pot and, more particularly to a plant or flower pot which comprises an automatic water feeding system.

5 Plant cultivation is a popular activity which helps people to enjoy life in a leisurely manner. However, due to the continuous increase of population density, living space is getting smaller and smaller. In cities, where many people live in apartments, it is often difficult 10 for them to acquire a private garden for plant cultivation. As an alternative, people can use flower pots for growing flowers or small plants. Many pot plants require daily 15 watering, so that if one forgets to water the pot plants or if one is absent for a couple of days and unable to water them during that time, the pot plants might wither or die.

Conventional flower pots are made with a water outlet at the bottom. When the pot plants are watered, the water drains away through the water outlet and gathers in a basin or the like beneath the flower pot (as shown in 20 Figure 1). While passing through the soil in the flower pot, the water carries some of the soil and other contaminants through the water outlet of the flower pot. Therefore, the water which collects in the water basin is 25 normally dirty and polluted, and encourages insects such as mosquitoes and gnats to reproduce which is both unsanitary and gives a very bad impression. Water in the water basin

may also encourage young children to play with the pot and perhaps even to overturn it.

In view of the drawbacks of conventional flower pots, the present invention provides a plant pot having a 5 water storage reservoir between inner and outer side walls thereof, wherein an inlet to the reservoir is provided in an upper part of the pot, and wherein at least one air vent into the reservoir is provided in an upper part of the pot, there being porous material in the base of the pot between 10 the reservoir and the interior of the pot.

Preferably the porous material is in the form of a plug covering a hole in an inner wall of the base of the pot.

15 Embodiments of the present invention will be described below in detail by way of example with reference to the accompanying drawings, in which:

FIG. 1 is sectional schematic drawing of a prior art flower pot;

20 FIG. 2 is a perspective cut-away view of a flower pot according to the present invention;

FIG. 3 is a perspective view of the flower pot of Fig. 2;

FIG. 4 is a perspective view of a second flower pot according to the present invention;

25 FIG. 5 is a schematic view of the flower pot of Fig. 3 with the stopper removed;

FIG. 6 is a view of the flower pot of Fig. 4 with the stopper removed;

FIG. 7 is a vertical cross-sectional view of the flower pot according to the present invention, in use.

Referring to Figs 2 to 6, the flower pots include a body 1 comprising a hollow base 12 and a hollow side wall 11. The hollow interior of the base and side wall acts as a water reservoir 2. A water inlet 131 is provided on a top flange 13 of the body 1 and communicates with the reservoir 2. A stopper 3 made of suitable material may be inserted into the inlet 131. A plurality of air vent holes 132 are also provided on the top flange 13 of the body on the opposite side of the body to the inlet 131. The air vent holes open into the reservoir and allow venting when water is being poured into the inlet 131, and as the water empties from the reservoir. A hole 121 is provided in the upper surface of the base 12 into which hole a plug 4 made of relatively high density foamed material, e.g. sponge, is inserted. The flower pot may be of circular (Figs 2,3,5) or square (Figs 4,6) plan form or any other shape.

Referring to Fig. 7, in order to fill the flower pot, the stopper 3 is removed and water is poured through the water inlet 131 into the reservoir 2. The water stored in the reservoir 2 is forced by means of the pressure generated by the water head in the reservoir through the pores of the plug 4 into the soil in the flower pot. Because the reservoir 2 is more or less completely enclosed space, the stored water cannot easily be spilt, nor can it evaporate.

The rate of delivery of water into the soil is

such that a full reservoir of water will keep the soil, and hence the roots of the flowers or plants in the pot, moist for a long period and reduce the frequency of watering.

With the stopper 3 inserted into the inlet 131,  
5 and with the air vent holes 132 being very small, insects such as gnats and mosquitoes are unable to enter the reservoir. Another advantage of the invention is that, unlike in the prior art, the storage reservoir and the flower pot are a single unit which gives a good visual  
10 impression.

CLAIMS

1. A plant pot having water storage reservoir between inner and outer side walls thereof, wherein an inlet to the reservoir is provided in an upper part of the pot, and wherein at least one air vent into the reservoir is provided in an upper part of the pot, there being porous material in the base of the pot between the reservoir and the interior of the pot.
- 10 2. A pot according to claim 1 wherein the reservoir includes the space between inner and outer walls of the base of the pot and the porous material is in the form of a plug covering a hole in the inner wall of the base of the pot.
- 15 3. A pot according to claim 1 or claim 2 wherein the porous material is a foamed material.
4. A pot according to any one of the preceding claims, wherein the inlet is provided with a removable stopper and a plurality of air vents are provided, the vents being of a small cross-section such as to inhibit the entry of insects into the reservoir.
- 20 5. A pot according to any one of the preceding claims wherein at least one air vent is provided on an opposite side of the pot from the said inlet.
- 25 6. A pot according to any one of the preceding claims, wherein said inlet is provided on a

flange part of the top of the pot.

7. A plant pot having a body which comprises a hollow base and a hollow side wall which together act as a water storage reservoir, wherein an inlet into said storage reservoir is positioned in a top flange of said body; a plurality of air vent holes provided in the top flange of said body communicating with said storage reservoir and on the opposite side of the pot from said inlet; a hole provided in the upper surface of said base between the internal volume of the pot and said storage reservoir, in which hole a stopper of high density sponge is positioned whereby water filled through the inlet is stored in the reservoir, passes through the high density sponge stopper into soil in the pot, and is thereafter absorbed through roots of plants planted therein.

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8. A flower pot substantially as described herein with reference to Figures 2 to 7 of the accompanying drawings.

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